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Compugen Ltd.
Gendore version
Copyright (c) 1993 - 1998
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2000, 09:38:05; Search time 1154.67 Seconds (without alignments) -3707.814 Million cell updates/sec US-08-455-683-1 1410 1 GGGCACCTISCIGAICCCAA......AACCCAGAITACAACIGCAG 1410 1642386 -1518192014 residues nsing sw model pass the threshold qb_bal:* qb_bal:* qb_on:* qb_on:* qb_ph:* qb_ph:* qb_ph:* qb_pr:* Pebruary 17, 821193 segs, nucleic search, OFIGO_NUC GenEmbl:* that 0 Title: Perfect score: Sequence: Number of hits Scoring table: Word size : OM nucleic Database : Searched: Run on:

qb_pl3:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		Education 2010	A68828 Sequence 5	S81111 kappa-opici	S77872 kappa opioi	D31665 Mouse MORGD	D31664 Mouse MORGD	S77869 kappa opioi	D31663 Mouse MCRGD	S77868 kappa opioi	TRANS WIRE MISCRITE	SUBBY4 CENA COGING	DIDEAS RACTUS NOTA	1222001 Rat Kappa O	DZZDJO KOLLUS MOEV	DIDDJ4: Kal IIIKINA IO	U00442 Rattus norv	VIOL SUCTUS NOIV	U04092 Cavia porce	H :	\sim	AFU12105 Sus scroz	A48343 Sequence 1	Ull053 Human kappa	136130 Homo sapien	126079 Homo sapien	137362 Homo sapien	U17298 Human kappa	U16860 Human kappa	AC009646 Fomo sapi	L02915 Rattus norv	M97656 Rat somatos	ď	194369 Cavia porce	ACTOINTED Danio rer	AR004660 Sequence	258 3	8 Sequence	592 Sequenc	R058215 Sequenc	Seguence 3	043276 Mus mu	3277 Mus	043278 Mu	2930 Mus m	2183		
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em_hum4:* gb_pr4:* gb_htg3:*

em_hum3:* gb_in1:*
gb_in2:*
em_bal:*
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gb_ntg4:* gb_ntg5:* gb_ntg5:*

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MUSKAPOPRE 1410 bp mRNA ROD 13-DEC-1993
Mouse kappa opioid receptor mRNA, complete cds.
L11065.
L11065.
L11065.1 G1:348248
kappa opioid receptor.
Mus musculus (library: Clontech *ML1036a) brain cDNA to mRNA.
Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia;
Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 1410) RESULT 1 MUSKAPOPRE LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM

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vasuda,K., Raynor,K., Kong,E., Breder,C.D., Takeda,J., Reisine, and Bell,G.I.
Cloning and functional comparison of kappa and delta opioid receptors from mouse brain
Proc. Natl. Acad. Sci. C.S.A. 90, 6736-6740 (1993)
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                                                                                                        /tissue_type="brain"
/tissue_lib="clontech #ML1036a"
186. 1328
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/db_xref="taxon:10090"
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Kieffer, B.L., Matthes, H.W., Simonin, F.
TRANSGENIC ANIMAL WHOSE EXPRESSION OF
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CENTRE NAT RECH SCIENT (FR)
Other publication FR 2750825 19980116.
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95.9%; Score 1408; D

Best Local Similarity 100.0%; Pred. No. 0;

Matches 1406; Conservative 0; Mismatches
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/protein_id="CAB42462.1"
/db_xref="GI:4759737"
                          /organism="unidentified"
/db_xref="taxon:32644"
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Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
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/translation="MESPIQIFRGDPGPTCSPSACLLPNSSSWFPNWAESDSNGSVGS
EDQQLESAHISPAIPVIITAVYSVVFVVGLVGNSLVMEVIIRYTKMTTATNITIENLA
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CHPVKALDFRTPLKAKIINICIMLASSVGISAIVLGGTKVREDVDVIECSLOFPDDE
YSWWDLFMKCVFVFARVIPVLIITVCYTLMILKLKSVRLLSGSREKURNLRRITKLV
LVVVAAVFIICWTPHHIFILVEALGSTSHSTAALSSYYECIALGYTNSLNPVLYAFLD
ENFKRCFRDFCFPIKMRMERQSINRVRNTVEDPASMRDVGGMNKPV*
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//db_xref="taxon:10095"
/db_xref="taxon:10095"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cloning and promoter mapping of mouse kappa opioid receptor gene Biochem. Blophys. Res. Commun. 209 (2), 539-647 (1995) 95251663 GenBark Staff at the National Library of Medicine created this entry [NCBI gibbs 166559] from the original journal article. This sequence comes from Fig. 2.
                                                                                                                                                                              1100
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GGTGGAGGTCTGGGGAAGCACCTCCCACACACACACTGCCTCTCCAGCTATTATTTCT3
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                                                                                                          TATTECCTTGGGTTATACCAACAGCAGCCTGAATCCTGTTCTCTATGCCTTTCTGGATGA
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Liu, H.C., Lu, S., Augustin, L.B., Felsheim, R.F., Chen, H.C., and Wel, L.N.
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/protein_id="AAB34130.1"
/db_xref="G1:998532"
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Direct Submission
Submitted (28-MAY-1994) to the DDEJ/EMBL/GenBank databases. Hiroshi
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CHPVKALDFRFPLKAKINIOTWLLASSVGISAHVLGGTKVREDVDVIECLLQFPDDE
YSGWDLFMKICVVVFFFVIPVLIITIVCYTLMILRLKSVRLISGSREDSHLRRITKLV
LVVVAVPITOTWPIHFILVEBLGSTSHSTAALSSYYFCIALGYTNSSLNPVLYAFLD
ENFKRCFRDFCFPIKMRMERQSTNRVRNTVQDPASMRDVGGNNKPV"
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/protein_id-"RAN0508.1"
/db_xref="G1: 808876"
/translation-"MESPIQIFRGDPGPICSPSACLLPNSSSWFPNWAESDSNGSVGS
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Takeshima, Tokyo Institute of Psychiatry, Department of Neurochemistry; 2-1-8 Kamikitazawa, Setagaya-ku, Tokyo 156, (1el.:03-3304-5701(ex.312), Fax:03-3329-8035) (ub.:ted (28-May-1994) to DDBJ by:
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/db_xref-"taxon:10090"
| Onlone_lib="phage_lambda_fixII"
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Pred. No. 5.1e-271;
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                                                                                  Hiroshi Takeshima
Department of Neurochemistry
Tokyo Institute of Psychiatry
2-1-8 Kamikitazawa, Setagaya-ku
Tokyo 156
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Submitted (28-MAY-1994) to the DDSJ/EMBL/GenBank databases. Hiroshi
Takeshima, Toxyo Institute of Psychiatry, Department of
Neurochemistry; 2-1-8 Kamikitazawa, Setagaya-ku, Tokyo 155, Japan
(Tel.03-3304-5701(ex.312), Fax:03-3329-8035)
Submitted (28-May-1994) to DDBJ by:
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Nishi,M., Takeshima,H., Mori,K., Nakagawara,K. and Takerchi,T. Structure and chromosomal mapping of genes for the mouse kapar-opioid receptor and an opioid receptor homologue (MOR-C) Biochem. Biophys. Res. Commun. 205 (2), 1353-1357 (1994)
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G-protein associated; kappa opioid receptor; opioid drugs and
peptides-binding; transmembrane protein.
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Mouse MORGD gene for Kappa-opioid receptor, exon 2.
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100.0%; Pred. No. 3.2e-194;
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Tokyo Institute of Psychiatry
2-1-8 Zamikhitazawa, Setagaya-ku
Tokyo 136
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Phone: 03-3304-5701 x312
Pax: 03-3329-8035.
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Liu, H.C., Lu, S., Augustin, L.B., Felsheim, R.F., Chen, H.C., Loh, H.H. and Wei, L.N.
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Biochem, Biophys. Res. Commun. 209 (2), 639-647 (1995)
95251663
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kappa opioid receptor [mice, Genomic, 1109 nt, segment 2 of 3.
877869
877869.1 GI:998330
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Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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CITTGGACTICCGAACACTTTGAAAGCAAAGATCAICAACATCTGCATTTGGCTCCTGG
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neurology; diagnosis; ds.
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This sequence codes for the human kappa opioid receptor and was obtained from two overlapping cDNA fragments isolated from a betained from two overlapping cDNA fragments were amplified from the man placental ornA library. The fragments were amplified from the library using PCR primers based on the sequence of human genomic clones which hybridised with a murine delta receptor cDNA probe. Nucleotide probes derived from the kappa opioid receptor coding sequence are useful for diagnosis of neurological, cardiovascular and psychiatric disorders associated with opioid
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Matches 789; Conservative 0; Mismatches 7;
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Example is Page 74-75. Lipp: English.

Example is Page 74-75. Lipp: English.

This conk acquence comprises the coding region for human kappa opioid receptor (KOR, see W30297), a G protein-coupled receptor (MOR). See W30297), a G protein-coupled receptor (Lipping a target cell (TC) comprises: (i) introducing into the cell a nucleic acid sequence (I) that expresses a G protein-coupled (SASSL), and (ii) exposing the transfected cell to small synthetic molecules (B) that bind to and activate (A), inducing the clipting (MOS). Section (MOS) has: (a) decreased binding affinity for a selected natural ilgand of the native receptor; (b) binding affinity for a cellular response. Also me are: (l) transfected with (I): (3) isolated (I): and (4) transfected during gene therapy receptor. Thuman animals expressing (A). Activation of A) results, in vitro or in vivo, in cellular proliferation, or secretion of a cellular product, particularly a heterologous cells that are successfully transfected during gene therapy colls that are successfully transfected during gene therapy of procedures. Other responses that can be regulated are cell migration and contraction, or pigment production. In transgenic animals, expression or stimulation of (A) is designed to develop cardinar arithments of procedures, escape because of procedures arithments are procedured to the procedure of a procedure
977 ATCCCATICICIACGCCTITCTICALGAAACTICAAGCGGTGTTICCGGGACTICTGCT 1036
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        contractions, dementia, neurodegeneration etc., for use as models
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26-MAR-1996; US-622348.
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Matches 789; Conserv
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P-PSDB; W30297.
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GATACACAAAGATGAAGACAGCAACCAACAITTACATAITTAACCTGGCITTGGCAGATG 316

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977 AICCCATTCTCTACGCCTTTCTTGATGAAAACTTCAAGCGGTTTTCCGGGACTTCTGCT 1035
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317 CITIAGITACTACAACCAIGCCCTTTCAGAGIACGGTCIACTTGATGAATTCCIGGCCTT
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                                                                                                                                          P-PSDB W30295.

P-PSDB W30295.

P-PSDB W30295.

Pespective activation of target cell expressing modified 5 protein coupled receptor — allows control of cellular proliferation.

Especially for amplification of transfected cells in gene therapy Example 1; Page 77-79; 17PP; English.

This cDNA sequence encodes a polypeptide (see W30299) comprising the human 6 protein-coupled Kappa opioid receptor (KOR) (see also W30297) flanked by sequence that facilitate the detection and purification of recombinant KOR, and especially KOR RASIS (see W30299), i.e. a receptor activated superiorly by a synthetic ligand. A novel method for selectively activating a target cell comprises; (1) introducing into the cell a nucleic acid sequence (1) that expresses a RASI (8) and (11) exposing the transfected cell to small synthetic molecules (B) that bind to and activate (A), inducing the 6 protein coupled cellular response cassociated with receptor activation. (A) has: (a) decreased binding affinity for a selected natural ligand of the native receptor; (b) sufficiently to produce the required cellular response. Also new are: transgenic cells including heterologous (1) in the genome; cellular implants comprising a FC transfected during gene therapy cellular response. Also new are: transgenic animals expressing (A). Activation of (A) results, in vitro or in vivo, in cellular proliferation of a cellular product or parientlarly a heterologous therapy procedures. Other responses that can be regulated are cell callular succession or stimulation of (A) is designed to develop cardiac arrhythmia, symptoms of bone disease, seizures, vascular contractions, dementia, neurodegeneration etc., for use as models of these diseases (claimed), the transgenic animals are also succession or stimulation of (A) is designed to develop contractions dementia, neurodegeneration etc., for use as as models of these diseases (claimed) are transfer end end contractions or primare to a seizure and end contractions or altered fat/lean ratios) or to control end entited f
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99.1%; Pred. No. 1.2e-209;
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Sequence 1284 BP; 265 A;
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                       (REGC ) UNIV CALIFORNIA, CONKILID BR;
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Best Local Similarity
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P-PSDB; W30298.
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1088 ATCCCATTCTCTACGCCTTTCTTGATGAAACTTCAAGCGGTGTTTCCGGGACTTCTGCT 1147
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728 ATGICATIGAGIGCICCIIGCAGIICCCAGAIGAIGACTACICCIGGIGGGACCICIICA 787
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Example 1: Pages 80-82; 137pp; English.

This cDNA sequence encodes RASSL GRIS.

Coupled receptor that is activated superiorly by synthetic ligands. CRI comprises human G protein-coupled kappa obtoid receptor (KOR) (see also W30297) modified at 17 amino acid positions to contain the corresponding amino acid of the delta optoid receptor. The ORI polynucleotide was obtained by site-directed mutagenesis of native
                                                                                                                                                                                                                                                                                                                                                                                                                   ATCCCATTCTCTACGCCTTTCTTGATGAAACTTCAAGCGGTGTTTCCGGGGACTTCTGCT
                                                                        TSAAGATCTGCGTCTTCATCTTTGCTTCGTGATCCCTGTCCTCATCATCGTCTGCT
                                                                                                                 ACACCTGATGATCCTGCGTCTCAAGANNGTCCGGCTCCTTTCTGGCTCCCGAGAGAAG
                                                                                                                                                    848 ACACCCIGAIGAICCIGCGICICAAAAAGCGICCGGCICCIIITGIGGCICCCGAGAAAG
                                                                                                                                                                                        640 AINNCAACCIGCGIAGGAICACAGACIGGICCIGGIGGIGGIGGIGGIGGIGGICIICGICGIC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human kappa opioid receptor prototype RASSL ORI DNA.
Selective target cell activation; G protein-coupled receptor;
RASSL; gene therapy; cell proliferation; Kappa opioid receptor;
human; transgenic animal; arrhythmia; bone disease; seizure;
vascular contraction; disease model; ss.
Chimeric - Homo sapiens.
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/note= "delta opioid receptor sequence"
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T92601:
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91. .1284
/*tag= b
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(REGC.) UNIV CALIFORNIA.
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25-MAR-1997; 005334.
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P-PSDB; W30299.
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Loh, H.H.

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Direct Submission
Submitted (G7-NOV-1994) David K. Grandy, Vollum Institute, Oregon
Submitted (G7-NOV-1994) David K. Grandy, Vollum Institute, Oregon
Health Sciences, University, 3181 S.W. Sam Jackson Park Road,
Portland, OR 97201, USA
Location/Qualifiers
1. 432
                                                                                                                                                                                                Cloning and promoter mapping of mouse kappa opioid receptor gene Biochem. Biophys. Res. Commun. 209 (2), 639-647 (1995) 95251663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. I. (bases 1 to 432) Grandy,D.K. Mapping of the human kappa opioid receptor gene to chromosome 8q11.2-q12; no evidence for multiple kappa opioid receptor genes Unpublished
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                                                                                                                                                                                                                                                            GenBank staff at the National Library of Medicine created this entry [NCBI gibbsq 166530] from the original journal article. This sequence comes from Fig. 2.
Location/Qualifiers
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Mus musculus kappa opioid receptor (oprkl) gene, partial cds.
U16998
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                                                                                           Eukarrota; Metazoa; Chordata; Craniata; Vertebrata; Mammal
Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
I (Dases 1 to 2074)
Liu, H.C., Lu, S., Augustin, L.B., Felsheim, R.F., Chen, H.C.,
and Wei, L.N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 2074;
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/organism="Mus sp."
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a 485 c 564 g
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GI:998529
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Mus sp.
Mus sp.
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                                                                                                                                                                                                                                                                                                                                                 Direct Submission
Submitted (28-MAY-1994) to the DDBJ/ZKBL/GenBank databases. Hiroshi
Takeshima, Tokyo Institute of Psychiatry, Department of
Neurochemistry; 2-1-8 Kamikitazawa, Setagaya-ku, Tokyo 156, Japan
Grei:03-3304-5701(ex:312), Fax:03-3329-8035)
Submitted (28-May-1994) to DCBJ by:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
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                                                                                                                                                            Dutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 423)
Nishi,M., Takeshima,H., Mori,M., Nakagawara,K. and Takeuchi,T. Structure and chromosomal mapping of genes for the mouse (kappa-opioid receptor and an opioid receptor homologue (MOR-C) Blochem. Blophys. Res. Commun. 205 (2), 1353-1357 (1994)
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D31663
D31663.1 G1:643593
G-protein associated; Kappa opioid receptor; opioid drugs and
peptides-binding; transmembrane protein.
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Eukaryota, Metazca, Chordata, Craniata, Vertebrata, Mammalia,
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                                                                                                   Mus musculus DNA, clone_lib:phage lambda fixII.
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/db_xref="taxon:10090"
/clone_lib="phage lambda fixII"
111. 367
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hiroshi Takeshima
Department of Neurochemistry
Tokyo Institute of Psychiatry
2-1-8 Kamikitazawa, Setagaya-ku
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="first protein
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03-3329-8035.
                                                                                                                                                                                                                                                                                                        2 (bases 1 to 423)
Takeshima, E.
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64 a 126 c
Chromosome 1 A2-3.
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Gaps

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Minami, M.
Direct Submission

Direct Submission

Direct Submission

Submitted (12-JUL-1993) to the DDBJ/EMBL/GenBank databases.

Masabumi Minami, Faculty of pharmaceutical Sciences, Kyoto
University, Department of Pharmacology; Kyoto, Kyoto 606-01, Japan

(E-mail:f51250@sakura.kudpc.kyoto-u.ac.jp, Tel:075-753-4546,
Eax:075-753-4866)

E 2 (bases 1 to 2481)

E 2 (bases 1 to 2481)

Kaneko, S. and Satoh, M.
Cloning and expression of a cDNA for the rat kappa-opioid receptor

UD FEBS Lett. 329 (3), 291-295 (1993)
                                            SAIO KIMIMICHI
COTK14/47,C12N1/21,C12N15/09,C12P21/02//A61K38/00,A61K38/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RATKOR 2481 bp mRNA ROD 04-FEB-1999
Rattus norvegicus mRNA for kappa opioid receptor, complete cds.
D16829.1 GI:404115
kappa opioid receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      576 EGCAAGAITGECATTECCATTGACIACTACAACAIGTTTACCAGCAFAITCACCTTGACC 635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rattus norvegicus cDNA to mRNA.
Rattus norvegicus
Eukaryota; Metazoa; Chordata; Vertebrata; Mammalia; Eutheria;
Rodentia; Sciurognathi; Muridae; Murinae: Rattus.
1 (bases 1 to 2481)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     501 IGCAAGAITGICATTICCALTGACIACTACAACATGITIACCAGCAIATTCACCTTGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     635 AFGATGAGTGTGGACCGCTACATTGCTGTGTGCCACCCTGTGAAAGCTTTGGACTTCCGA
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                                                                                                                                                                                          /organism='Rattus sp.'
111. 1253
/product='rat kappa-opioid receptor'.
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                                                                                                                                                                                                                                                                                                                                                                      Length 2481;
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                                                                                           Cleri:19), (Clerci/Ce, Cleri:19), CO7K99:00;
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Pred. No. 4.2e-61;
O; Mismatches 3;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 816 TCCTTGCAGTTTCCTGATGATATTCCTGGTGGGA 853
                                                                                                                                              Location/Qualifiers
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                30-JUL-1993 JP 1993190261
09-JUL-1993 JP 93P 170591
                                                                                                                                                                                                                                                            1. .2481
/organism="Rattus sp."
/db_xref="taxon:10118"
. 588 c 544 g 7
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                                                                                                              strandedness: Double:
                                                                                                                                topology: Linear
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Best Local Similarity 98.9%;
Matches 275; Conservative
                                                                                 (C12N1/21,
                                                                                                                                                                                 source
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/product="kappa opicid receptor"
/protein_id="kaAa5559.1"
/db_xref="%I" xYXXXX TATNIYIENLITADALVITIMFFQSAVYLMNSNPFGDVL
/translation="YIXXXX TATNIYIENLITADALVITIMFFQSAVYLMNSNPFGDVL
CKIVISIGYZNNFISIFTLIMMSVDRYIAVCHPVKALDFRTPLKAKIINICIMLLASS
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                                                                                                                                                                                               putative transmembrane domains II, III and
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Rodertia; Sciurognathi; Muridae; Murinae; Rattus.
1 (bases 1 to 2481)
Sato, K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-SEP-1997
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                                               /clone_lib="Stratagene lambda FIX"
/sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                         Score 255; DB 12;
Pred. No. 1.1e-136;
0; Mismatches 1;
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CDNA coding rat Kappa-opioid receptor.
E08874
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/organism="Mus musculus"
/db_xref="taxon:10090"
/clone="R2lmg1"
                                                                                                                                                                                                                                                                                                                                                            85 9
                                                                               /dev_stage="adult"
14. .366
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/gene="oprk1"
/note="encodes p
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92 c 85
                                                                                                                                                                                                                                    /codon_start=2
                                                                                                                   /gene="oprk1"
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JP 1995070191-A/1
                                                                                                                                                   /gene="oprkl"
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al Similarity . 99.7%;
305; Conservative
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BASE COUNT ORIGIN

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LADALVITTARPOSAVYLMNSWPEGDVLCKTVISIDYNWFTSIFTLEMSYDRYIAV
CHPVKALDERTPLKAKIINCIMLASSVGTSATUGGTYREDVDVIECSLQPPDB
TSWPLEMKICVFVPRAFUPULINVOTLAHILKESVRLESGSREKDNIRRITKLV
LVVVAVFILCWTPHHILTLVEALGSTSFSTAVLSSYYFCIALGYTSSLNPVLYAFEL
ENFKRCFRDFCFPIKMRMSRQSINRVRNIVQDPASMRDVGGMKRV"
                                                                                                                                                                                                    /translation="MESPIQIFRGEPGPTCAPSACLLPNSSSWFPNWAESDSNSSVGS
EDQQLEPAHISPAITTAVYSVVFVVGLVGNSLVMFVIIRYTKMKTATNIYIFNLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RAIKORIB 2094 bp mRNA ROD 23-NOV-1993
Raitius norvegicus kappa opioid receptor (KOR-1) mRNA, complete cds.
122536
122556.1 GI:425188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protein.
Rattus norvegicus (strain Sprague-Dawley) (library: lambda gt10)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Vertebrata; Mammalía;
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Li,S., Zhu,J., Chen,C., Chen,Y.-W., de Riel,J.K., Ashby,B. a Liu-Chen,L.-Y.
Molecular cloning and expression of a rat k opioid receptor 94059009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    636 ATGATGAGTGTGGACCGCTACATTGCTGTGTGCCACCCTGTGAAAGCTTTGGACTTCCGA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 125; DB 12;
Pred. No. 4.1e-61;
0; Mismatches 3;
                                                                                                                  /evidencemexperimental
/product="kappa opioid receptor"
/protein.id="AAA41455.1"
/db_xref="GI:409237"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              816 TCCTTGCAGTTTCCTGATGATATTCCTGGTGGGA 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /tissue_type="brain (striatum)"
/tissue_lib="lambda gt10"
223. .1365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Craniata;
      /organism="Rattus norvegicus"
/db_xxef="taxon:10115"
/tissue_type="whole brain"
71. .1213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Rattus norvegicus"
/strain="Sprague-Dawley"
/db_xref="taxon:10116"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         adult brain (striatum) cDNA to mRNA.
Rattus norvegicus
Eukaryota; Metazoa; Chordata; Crania
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Matches 275; Conservative
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EDQQLEPAHISPAIDVIITAVYSVV="VYGLVGNSLVMFVIIRYTKMKTATNIYIFNLA
LADALVTITMPFQSAVYLMNSWPFGDVLCKIVISIDYYNMFTSIFILTMMSVDRYIAV
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CHPVKALDERTPLKAKIINICIWLLASSVGISAIVLGGTKVREDVDVIECSLQFPDDE.
YSWWELFMKTOVFVRARTIVILIVOYTLMIIRKKSVRLLGGSREKDRNLRRIIKKLY
LUVVAVYIICWTPIHIVFILVBALGSTSHSTAVLSSYYPCIALGYTNSSLNPVLYAFTD
ENFRECFRDFCPFIKKBERGSTSHSTAVLSSYYPCIALGYTNSSLNPVLYAFTD
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1 (bases 1 to 1358)
Chen Y., Mestek,A., Liu,J. and Yu,L.
Molecular cloning of a rat Rappa opicid receptor reveals sequence similarities to the mu and delta opicid receptors
Biochem. J. 295, 625-628 (1993)
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Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
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L22001
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                                                                                                                                                                                                                                                                                                                             /product="kappa opioid receptor"
/protein_id="BAA04109.1"
/db_xref="G1:404115"
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Pred. No. 4.2e-61;
0; Mismatches 3;
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Rattus norvegicus whole brain cDNA to m
Rattus norvegicus
                                                                                                                                                                                                                                           /organism="Rattus norvegicus"
Submitted (21-JUL-1993) to DDBJ by:
                                                                    Sciences
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111. .1253
                                                                                                                                                    075-753-4546
075-753-4586.
Location/Qualifiers
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1. .1358
                    Masabumi Minami
Department of Prarmacology
Faculty of pharmaceutical
Kyoto University
Kyoto, Kyoto 655-01
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LADALVTTHRFOSAYYLMNGWPFGDVLCKTVISIDYYNKFDSTSTTLTMSVDRYIAV
CHPYKALDFRTPLKAKIINICIMLLASSVGISAIVLGGTKVREDVDVIECSLQFPDDE
YSWFJLFMX.CVFVPAFVIPVIIIVCYTLAKILRIKGSPRLJGGSREKDRNLRFITKLY
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/protein_id="AAA41496.1"
/b_xref="GI:425189"
/tansalation="MESPIGIFRGEPGPICAPSACLLPNSSSWPPNWAESDSNGSVGS
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195him, Takeshima, H., Fukuda, K., Kato, S. and Mori, K.
CDNA cloning ard pharmacological characterization of an opioid
receptor with high affinities for kappa-subtype-selective ligands
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Submitted (19-JUN-1993) to the DDBJ/EMBL/GenBank databases. Hiro
Takeshima, International Institute for Advanced Studies; c/o
Shimadzu Corporation N-80, Inshinokyo-Kuwahara-cho, Kyoto 604,
Japan (Tel:075-823-1208, Fax:075-811-8188)
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Rattus.
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G-protein compled receptor; opioid receptor; transmembrane p
Rattus norvegicus (strain Wistar) adult brain cDNA to mRNA,
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Pred. No. 4.2e-61;
A: Mismatches 3; Indels
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International Institute
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              223. .1365
/gene="KOR-1"
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gene="KOR-1"
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Similarity 98.9%;
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/translation-"MESPIQIERGEPQPTCAPSACLLPNSSSWEPNWAESDSWGSWGS
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LVVVAVFIICHTPIHIFILVEALGSTSSTSTSTAVLSSYYFCIALGYTNSSLNPVLKAFLD
ENFRCERDFCEPIKMRMERQSTNRYRNTVQDPASMRDVGGNNKPV"
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                                                                                                                                                                                          /organism="Rattus norvegicus"
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49. .1191
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075-811-8186.
Location/Qualifiers
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Kyoto 604
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Best Local Similarity 98.9
Matches 275; Conservative
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used to express and locate these receptors, and screen

receptor

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cellular response associated with receptor activation. (A ) has: (a) decreased Einding affinity for a selected natural ligand of the native receptor; (b) Einding affinity for (B); and (c) is activated to be binding affinity for (B); and (c) is activated to be binding (B); sufficiently to produce the required cellular response. C also new are: transpectic cells including heterologus (I) in the genome: cellular implants comprising a TC transfected with (I); solated (I); and transperic animals expressing (A). Activation of Secretion of a cellular product, particularly a heterologus threapeutic protein encoded by a second inserted nucleic acid conceptuate oprotein encoded by a second inserted nucleic acid consequence. Particularly it is used to expand the relatively few cells that are successfully transfected during gene therapy procedures. Other responses that can be required are cell migration and contraction, or pigment production. In transgenic animals, expression or stimulation of (A) is designed to develop cardiac arritythma, symptoms of bone disease, seizures, vascular contractions, dementia. neurodegeneration—". for use as models
human KCR cDNA (see T99998) and includes flanking sequences that encode signal and epitope peptides to facilitate the detection and purification of recombinant ONL. A movel method for selectively extirating a target cell (TC) compaises: (i) introducing into the cell a nucleic acid sequence (I) that expresses a RASSL (A) and (ii) exposing the transfected cell to small synthetic molecules (3) that bind to and activate (A), inducing the G protein coupled cellular response associated with receptor activation. (A) has: (a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       contractions, dementia, neurodegeneration ~ U., for use as models of these diseases (claimed). The transgenic animals are also used for production of improved food products (e.g. increased calcium content in eggshells or altered fat/lean ratios) or to control
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  318 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               318 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               373 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               266 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   r induce labour.
1275 BP; 266
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                                                                                                                                                                                                                                                                                                            1023 TGCTGTCTCCAGCTATTACTTGTGCATGGCCTTAGGCTATACGAAGAGTAGCGGAATCC 1082
                                                                                                                                                                                                                                                                                                                                                                                         1083 CATTOTOTAGGCOTTTOTTGATGAAACTTCAAGCSGTGTTTCCGGGACTTCTGCTTTCC
                                                                                                644 CAACCTGCGIAGGATCACCAGACTGGTCCTGGTGGTGGTGGCAGTCTTCGTCGTCGTCGTG 703
                                                                                                                                                                                 704 GACTCCCATTCACATATTCALCCTGGTGGAGCTCTGGGGGAGCACCTCCCACAGCACGC 763
                                                                                                                                                                                                                                                                     764 IGCICITCICCASCIATIACITCTSCATCGCCITAGGCTATACCAACAGTAGCCTGAAIGC 823
                                                                                                                                                                                                                                                                                                                                                      824 CMITCHCTACGCCITTCTTGATGAAACTTCAAGCGGTGTTTCCGGGACTTCTGCTTTCC 883
                                                                                                                                        903 CAACTGCSTAGGATCACCASACTGGTCCTGGTGGTGGTGGCAGTCTTCGTCGTGCTG 962
                                                           Gaps
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                 Length 1275;
                                                         0; Indels
               Score 252; DB I; Le
Pred. No. 2.4e-116;
                                                         Mismatches
25.2%; Scur
100.0%; Pre
                                                         Conservative
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                                   Similarity
                                                      252;
               Query Match
Best Local 8
                                                         Matches
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WPI: 94-083099/10. DNA encoding opioid receptors and antibodies against this

Kaufman D, Keith DE;

13-AUG-1992; US-929200. (RESC) UNIV CALIFORNIA. Edwards RU, Evans CU.

03-MAR-1994, 13-ACC-1993, U07665.

Homo sapiens WO9404552-A.

15-SEP-1994 (first entry)
Partial sequence of the human kappa opioid receptor

Q56702 standard; DNA: 2447 BP.

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RESULT

1143 ACTGAAGATGAG 1154

SS.

Opidia receptor, morphine, opiate;

genomic clone H14 (KORa),

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Polymolectides and peptides derived from opioid receptor polymolectides and peptides derived from positions and in screening assays for usein therapeutic compositions and in screening assays for usein drug substances.

Claim 10; Page 207-211, 100pp; English.

The nuclectide sequence of the novel mouse kappa opioid receptor gene model in the yene was isolated from a mouse brain cDNA library using a fragment, amplified from the cona. Library with primers (7529-91) as a probe. The primers are based on the conserved sequences present in the second and third transmembrance domains of somatostatin (SRIF) receptor sibrypes SSIR1, SSIR2 and SSIR2. The 1.2 kb Pstl fragment from the mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mouse: kippa, delta, mu; opioid receptor, brain; primer, PCR, amplify, transmembrane domain; scratostatin; receptor; human; expression vector;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
         Example. For polid (art)agonist activity

Example. Fig Bb: 74pp; English.

To isolate opiate receptor genomic clones, 300,000 human genomic
clones and a similar number of mouse genomic clones were probed
fragment. One mouse clone and three human genomic clones were
isolated. The 3 human clones had very different EcoRI patterns
human genomic clones which were designated H3, H14 and H20. H14 maps
to chromosome B. It encodes the human kappa opioid receptor.
Sequence 2447 BP; 683 A; 512 C; 498 G; 747 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                               61 TCACCAGCATCTICACCTISACCATGATGAGCGIGGACCGCTACATIGCCGTGTGCCACC 120
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                                                                                                                                                                                                                                                                                                  Gaps
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                                                                                                                                                                                                                                                                                                                                                                     _ corgecontriggeargrecistecaagarastaarrecarreararcaacarer
                                                                                                                                                                                                                                                                                                                                                                                                              271 TCACCAGCATCTTCACCTTGACCATGATGAGCGTGGACCGCTACATTGCCGTGTGTGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       331 COGTGAAGGCTTTGGACTTCCGCACACCCTTGAAGGCAAAGATCALCAATATCTGCAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               391 GGCTGCTGTCGTCATCTGTTGGCATCTCTGCAATAGTCCTTGGAGGCACCAAAGTCAGGG
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                                                                                                                                                                                                                                                             Length 2447;
                                                                                                                                                                                                                                                         Query Match

24.5%; Score 245; DB 1; Length 24

Best Local Similarity 100.0%; Pred. No. 7.5e-113;

Matches 245; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /product= mouse kappa opioid receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mouse kappa opioid receptor mORK1 cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     truncate; chimaeric; assay: probe; ss.
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186. 1328
/*tag= a
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q75926 standard; DNA; 1410 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-AUG-1995 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 AAGGT 245
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30-JUL-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-NOV-1993;
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applications

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Sequence

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PT Transgenic animals defective in one type of opioid receptor - used provided animals defective in one type of opioid receptor - used provided animals defective in the day addiction and transplant rejection, lacking side effects of known opiate(s) provided animals of transplant respective, lacking side effects of known opiate(s) provided a transplant respective represents the gene encoding the generate a transgenic receptor protein. The sequence is used to generate a transgenic con-human mammal for identifying agents for treating disorders con-human mammal for identifying agents for treating disorders the deletion of an exon and/or insertion of a marker gene, e.g. the deletion of an exon and/or insertion of a marker gene, e.g. the comproin resistance gene, into the sequence. Especially the expression neomycoin resistance gene, into the sequence. Especially the expression of the gene is altered in nervous issue. The agents are potentially contact in the method may isolate and identify powerful analgesics that lack morphine-like side effects.

Sequence 1408 BP, 322 A; 355 C; 336 G; 391 T;
Mouse; kappa opiate receptor; transgenic animal; mammal; identification; exon; nervous tissue; pain; drug addiction; transplant rejection; immunosuppressant; analgesic; morphine; side effect; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA encoding opicid receptors and antibodies against this bunk encoding opicid receptors and locate these receptors, and screen receptor - used to express and locate these receptors, and screen cpds. for opicid (ant)agonist activity claim 1: Fig 5: 74pp: Endlish activity claim 1: Fig 5: 74pp: Endlish claim of the DOR-1 clone was isolated. cell line. A single clone, named the DOR-1 clone was isolated. cell line. A single clone, requences in GenBank showed highest homology Comparisons with known sequences in GenBank showed highest homology between DOR-1 and the G-protein-coupled somatostatin receptor. Other between DOR-1 and the G-protein-coupled somatostatin receptor. Other features of the DOR-1 clone AA sequence deduced from the cDNA sequence include 3 consensus glycosylation sites at residues 18 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-SEP-1994 (first entry) Sequence of murine delta opioid receptor in the DOR-1 cDNA clone. Opioid receptor; morphine: opiate; ss.
                                                                                                                                                                                                                                                                                                              22-JAN-1999.
11-UDL-1996; FR1282.
15-UDL-1996; FR-008810.
(CNRS ) CENT NAT RECH SCI.
CDIETICA N. Xieffer BL, LeMeur M, Matthes HWD, Simonin FH;
NPI; 98-110582/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1; Le . 1.4e-06;
                                                                                                                                                                                                                                /product= "kappa opiate receptor"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 32; Pred. No.
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                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            056700 standard; cDNA; 1821 BP.
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/*tag- a
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(REGC.) UNIV CALIFORNIA.
Edwards RH, Evans C.
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13-AUG-1993; U07665.
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P-PSDB; R48629.
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Best Local Similarity
Matches 32; Conserv
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Q56700
                                                                                                                                  Mus sp.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The microstice sequence of the novel mammalian kappa opicic receptor. The microstice sequence of the novel mammalian transmit from rat brain mRNA cDNA. The gene was isolated by amplifying a fragment from rat brain mRNA by reverse transcriptase-POR (RT-PCR) using primers Q86726-7 derived from by reverse transcriptase-POR (RT-PCR) using primers Q86726-7 derived from the mouse delta-opicid receptor gene. This fragment was cloned into the plasmic pCRII to produce pRII. The plasmid pRII was used to probe a rat prasmid pCRII to produce pRII. The plasmid pRII was used to probe a rat brain DNA library in lambda AAPII to obtain a clone of the rat kappa brain DNA library in lambda AAPII to obtain a clone was introduced into E.coli JMAG9 for production of the receptor protein is useful for screening of analgesic and hypnotic compounds including
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mammalian kappa opioid receptor protein cDNA.
Mammalian kappa opioid receptor; mouse delta opicid receptor; analgesic;
amplification; primer; rat; probe; E.coli; RT-PCR; hypnotic compound; ds.
                                       kappa opioid receptor clone, lambda ms:-1, was subcloned into the CKV promoter-based expression vector pCMV-6b. The resultant construct pCMV-ms:-1 was transfected into COS-1 cells for protein production. The gene encoding the opicid receptor can be used to produce complete. Transeted or chimaeric opioid receptor proteins. The opioid receptors thus produced are useful for the development of novel assays designed to select or improve substances, capable of interacting with the opicid receptor proteins, for use in diagnosis, drug design and therapetitic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                     391 T;
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1.4e-05;
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/product= kappa opicid receptor
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100.0%; Pred. No. 1.4
tive 0; Mismatches
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Pred. No. 1.46
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                              360 0;
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1111. .1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 2; Page 9-10; 15pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                      3.2%; Scc..
100.0%; Pre-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q86725 standard; cDNA; 2481 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       629 A;
                                                                                                                                                                                                                                                                                                                                                  322 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-MAR-1995.
30-UTL-1993; 190261.
09-UTL-1993; JP-170591.
(TAKE ) TAKEDA CHEM IND LTD-
WPI; 95-144857/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             peptides and proteins.
Sequence 2481 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Owery Match
Best Local Similarity
Matches 32; Conserv
                                                                                                                                                                                                                                                                                                                                                        1410 BP;
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Best Local Similarity
Matches 32; Conserv
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J07070191-A

086725

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RESULT

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Mouse kappa opiate receptor gene

V49254; V49254; 28-OCT-1998 (first entry)

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RESULT V49254

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Gaps

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Length 1408; Indels

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NAME OF THE PROPERTY OF THE PR
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Mouse delta opioid receptor mCRD1 cDNA.
Mouse: kappa: delta; mu; opicid receptor; brain; primer; PCR; amplify;
transmembrane domain; somatostatin; receptor; human; expression vector;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kieffer B.

Wapi, 94-17255/22.

Re-PSDB, R65503.

Folypeptide, antisense nucleic acid, probes, recombinant cells polypeptide, antisense nucleic acid, probes, recombinant cells and ligands, useful in diagnosis and treatment of e.g. and ligands, useful in diagnosis and treatment of e.g. and ligands are folypeptide disorded from hybridoma NG108-15, was used to claim 3; Page 16-18; 29pp; French.

A CDNA bank constructed from hybridoma NG108-15, was used to transfect cost cells. The cells were tested for ability to bind tritium-labelled Tyr-D-Thr-Gly-Phe-Leu-Thr, in the presence of the opicid antagonist naloxone. Clone K56 was isolated from a positive colony and found to contain a 2216pp insert. This chan a positive colony and found to contain a 2216pp insert. This can be expected or a dissociation constant 1-4n and Banx 3.9-6.4 pmole/mg protein. Sequence 2215 BP; 460 X; 649 G; 460 I;
                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
33 (predicted to be in the extracellular N-terminal domain), and at residue 310 (close to the C-terminus and predicted to be intracellular). Phosphokinase C consensus sites are present within predicted intracellular Gomains, at residues 242.255, 344 $ 352. Seven putative membrane-spanning regions were identified. The DOR-1 clone produces a delta receptor with a predicted mol. wt. of 40,558 Kaltons prior to post-translational modifications.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-Jan.1995 (first entry)
Murino delta opioid receptor coding sequence.

delta opioid; enkephalin; receptor; mouse; murine; analgesic; pain;
drug addiction; neurological disorder; psychiatric; disorder;
cardiovascular disorder; ds.

Mus musculus.

Location/Qualifiers
cds
cds
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6
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                                                                                                                                                                                                                                                                             4.4e-05;
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Pred. No. 4.5e-05;
                                                                                                                                                                                                                                                      Score 29; DB 1;
                                                                                                                                                                                                                                            Query Match 2.9%; Score 29; DB Best Local Similarity 100.0%; Pred. No. 4.4 Matches 29; Conservative 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                               291 ACCATGATGAGCGTGGACCGCTACATTGC 319
                                                                                                                                                                                                                                                                                                                                                                                       446 ACCARGARGACGRASACCGCTACATIGG 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-NOV-1992; 013526.
10-NOV-1992; FR-013526.
(UKST-) UNIV PASTEUR STRASBOURG LOUIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  476 ACCAIGAIGAGCGIGGACCGCIACATIGC 504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
59. .1174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  291 ACCATGATGAGCGTGGACCGCTACATTGC
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100.0%; Prev
0; N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q66656 standard; cDNA: 2216 BP
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Q75927;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29; Conservative
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Best Local Similarity
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Q75927
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Q66656
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Polypucleotides and peptides derived from opioid receptor
Polypucleotides and peptides derived from opioid receptor
Polypucleotides - for use in therapeutic compositions and in
Polypucleotides - for useful drug substances.

Scheming assays for useful drug substances.
Claim 6; Page 215-222: 300pp; English.
Claim 6; Page 215-222: 300pp; English.
CC mORDI. The gene was isolated from a mouse brain cDMA library using a fragment (amplified from the CDMA library with primers 07/929-30) as a probe. The primers are based on the conserved sequences present in the core second and third transmembrane domains of some observed sequences present in the course dalta opioid receptor clone, lambda msl-2, was subcloned into the converse dalta opioid receptor clone, lambda msl-2, was subcloned into the core proveming the opioid receptor can be used to produce complete.
CC MY promoter-based expression overtor pCMY-6: The resultant construct CMY produced are useful for the development of novel assays designed to select or improve substances, capable of interacting with the opioid receptors and invarious for use in diagnosis, drug design and therapeutic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mouse delta opiate receptor gene.
Mouse; delta opiate receptor: transgenic animal; manmal; identification;
exon; nervous tissue; pain; drug addiction; transplant rejection;
immunosuppressant; analgesic; morphine; side effect; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ĥ
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11-JUL-1997; F01282.
15-JUL-1996; FR-008810.
(CNRS.) CENT MAT RECH SCI.
Dierich A, Kieffer BL, LeMeur M, Matthes HWD, Simonin FH;
WPI; 98-110582/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                      /product= mouse delta opicid receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 650 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 2.9%; Score 29; DB 1; Les
Best Local Similarity 100.0%; Pred. No. 4.5e-05;
Matches 29; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "delta opiate receptor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              665 C;
truncate, chimaeric: assay; probe, ss.
Mus musculus,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    291 ACCATGATGAGCGTGGACCGCTACATTGC 319
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                                                           Location/Qualifiers 12. .1130
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                                                                                                                                                                                                                                                                                                                                                                                              Reisine I, Yasuda K;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           485 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /product a
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/*tag= a
                                                                                                                                                                                                                                                                 20-MAY-1993; CS-066296.
30-UCL-1993; CS-100694.
05-NOY-1993; CS-147592.
(ARCH-) ARCH DEW CORP.
Bell GI, Reisine I, Yas
                                                                                                                       /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2272 BP:
                                                                                                                                                                                                                                           20-MAY-1994; UC5747
                                                                                                                                                                                                                                                                                                                                                                                        Bell Gi, Reisine ... WFI; 95-022804/03. P-PSDB; R67670.
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28-OCT-1998
                                                                                                                                                                               W09428132-A
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Search completed: February 17, 2000, 10:11:16
Job time: 1931 sec
                          Location/Qualifiers
214. .1410
/*tag= a
                                                                                          23-MAR-1995.
13-SEP-1994; UL0358.
13-SEP-1993; US-120601.
(INDV ) UNIV INDIANA FOUND.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 26; Conserv
                                                                                                                                                                               95-131351/17.
                                                                                                                                                                                                R71964
                                                                          WO9507983-A
               Sp.
                                                                                                                                                                                               P-PSDB;
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This sequence represents the gene encoding the mouse delta opiate receptor protein. The sequence is used to generate a transcenic non-human mammal for identifying agents for treating disorders associated with opiate receptors. In the mammal, the expression of the gene encoding the opiate receptor is modified, particularly by meaning a severe gene, into the sequence. Especially the expression of the gene is altered in nervous tissue. The agents are potentially prevention or treating severe pain (chronic or acute), drug addiction and/or the method may isolate and identify powerful analgesics that lack sequence 2218 BP. 460 A: 648 C; 650 G; 460 T;
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                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              #65188 is the rat mer, with blotiny-b-endorphin (R5666) as its brain membranes, with blotiny-b-endorphin (R5666) as its ligand. It is encoded by the nucleotide sequence 079199 which was synthesised using 071022 and 071023 as PCR primers. R65188 is useful for identifying other receptor subtypes, for screening new opioid ligands, and for studying mechanisms of opioid action, e.g. day addiction. Sequence 2070 BP: 526 A; 564 C; 423 G; 557 T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pure mu-type opioid receptor protein - and nucleic acid ocding
for it.
Claim 1: Fig 11: 39pp; English.
                                                                                                                                                                                                                                                         Length 2218;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2.6%; Score 26; DB 1; Length 2070;
106.0%; Pred. No. 0.0014;
Live 0: Mismatches 0; Indels
                                                                                                                                                                                                                                                                      Pred. No. 4.5e-05;
Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-APR-1995 (first entry)
Rat mu-subtype opioid receptor cDNA.
Mu-subtype opioid receptor; MSOR; Grug addiction; ds.
Rattus rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /product= Mu-subtype_opioid_receptor
                                                                                                                                                                                                                                                       Score 29; DB 1;
                                                                                                                                                                                                                                         2.9%; Scur.
100.0%; Pred. No. *..
'.. C; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-FEB-1993; US-026140.
(AMCY ) AMERICAN CYANAMID CO.
Corbett MJ, Eppler CM, Shieh H, Zysk JR;
                                                                                                                                                                                                                                                                                                                     291 ACCATGATGAGCGTGGACCGCTACATTGC 319
                                                                                                                                                                                                                                                                                                                                              475 ACCATGATGAGGGGGGCCGCTACATTGC 503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                       Q79199 standard; cDNA; 2070 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1; Fig 11; 39pp; English.
                                                                                                                                                                                                                                                Query Match 2.9
Best Local Similarity 100.
Matches 29: Conservative
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/*tag= a
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Best Local Similarity 100.
Matches 26; Conservative
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09-FEB-1994, 101968.
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P-PSDB; R65188.
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Q79199
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Gaps

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GATTACTACAACATGTTCACCAGCAT 280 404 GATTACTACAACATGTTCACCAGCAT 429

255

ã 셤 069222; 20-0CT-1995 (first entry) Rat mu opicid receptor cDNA. Mu opicid receptor; MOR-1; gene therapy; diagnostic; ss.

DE DE

Q89222 standard; cDNA; 1618 BP.

15

RESULT 289222

ď Gaps diagnosis, treatment and drug screening.

Disclosure, Page 190-194: 265pp; English.

A 365 bp fragment of the mouse delta opioid receptor was used to screen a rat brain cDNA library under low stringency conditions.

One positive cione included the sequence given in Q89222, encoding mu opioid receptor, MOR-1 (R71964). MOR-1 was stably expressed in Sequence 1618 BP: 390 A; 486 C; 370 G; 372 T; 0; New nucleic acid encoding new human mu opioid receptor - and related vectors, transformed cells, antibodies etc., useful Length 1618; Indels DB 1; Leus 7. 0.0014; 0; 370 G; Mismatches 486 C; Score 26; Pred. No. 280 677 2.5%; Sco... 100.6%; Pre 652 GATTACTACAACATGTTCACCAGCAT 255 GAITACTACAACAIGTTCACCAGCAT 390 A;

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